

# Analogue+Digital Multimeter



## ST-3502

### FEATURES

- 3½ digit, high contrast LCD, with a maximum display of 1999
- Automatic polarity indication, zero adjustment
- Low battery (BAT) indication
- Over range indication: highest digit of (1) or (-1)
- EN 61010-1 CAT III 600V, EN 61326-1

### ANALOGUE DISPLAY

- Large 90° wide and 84mm long mirror scale. (adapted to digital, analogue maximum indication 2400)
- Shock and vibration resistant TAUT BAND movement
- Pointer can be selected to either left-hand zero (normal mode) or center zero (galvo-mode)
- In galvo-mode pointer deflects right to indicate positive polarity and left to indicate negative polarity
- Automatic center zero and ohm zero
- Dimensions: 175(L) × 109(W) × 44(D)mm

### SPECIFICATIONS

#### DC Voltage

| Range | Analogue Maximum | Resolution Digital | Accuracy      |          | Protection |
|-------|------------------|--------------------|---------------|----------|------------|
|       |                  |                    | Digital       | Analogue |            |
| 200mV | 240mV            | 100µV              |               |          | DC500V     |
| 2V    | 2.4V             | 1mV                |               |          | AC350V     |
| 20V   | 24V              | 10mV               | ±(1%rdg+1dgt) | ±3%F.S.  | DC1200V    |
| 200V  | 240V             | 100mV              |               |          | AC800V     |
| 600V  | 600V             | 1V                 |               |          |            |

• Input impedance: 10MΩ

#### AC Voltage

| Range | Analogue Maximum | Resolution Digital | Accuracy        |          | Protection |
|-------|------------------|--------------------|-----------------|----------|------------|
|       |                  |                    | Digital         | Analogue |            |
| 200mV | 240mV            | 100µV              |                 |          | DC500V     |
| 2V    | 2.4V             | 1mV                |                 |          | AC350V     |
| 20V   | 24V              | 10mV               | ±(1%rdg+5dgt)   | ±3%F.S.  | DC1200V    |
| 200V  | 240V             | 100mV              |                 |          | AC800V     |
| 600V  | 600V             | 1V                 | ±(1.5%rdg+5dgt) |          |            |

• Input impedance: 10MΩ

#### DC Current

| Range | Analogue Maximum | Resolution Digital | Accuracy      |          | Protection |
|-------|------------------|--------------------|---------------|----------|------------|
|       |                  |                    | Digital       | Analogue |            |
| 200uA | 240uA            | 100nA              |               |          |            |
| 2mA   | 2.4mA            | 1µA                |               |          |            |
| 20mA  | 24mA             | 10µA               | ±(1%rdg+5dgt) | ±3%F.S.  | 800mA      |
| 200mA | 240mA            | 100µA              |               |          |            |
| 10A   | 10A              | 10mA               | ±(2%rdg+3dgt) |          | 10A        |

#### AC Current

| Range | Analogue Maximum | Resolution Digital | Accuracy      |          | Protection |
|-------|------------------|--------------------|---------------|----------|------------|
|       |                  |                    | Digital       | Analogue |            |
| 200uA | 240uA            | 100nA              |               |          |            |
| 2mA   | 2.4mA            | 1µA                |               |          |            |
| 20mA  | 24mA             | 10µA               | ±(1%rdg+5dgt) | ±3%F.S.  | 800mA      |
| 200mA | 240mA            | 100µA              |               |          |            |
| 10A   | 10A              | 10mA               | ±(2%rdg+3dgt) |          | 10A        |

#### Resistance

| Range  | Analogue Maximum | Resolution Digital | Accuracy        |          | Protection |
|--------|------------------|--------------------|-----------------|----------|------------|
|        |                  |                    | Digital         | Analogue |            |
| 200Ω   | 5kΩ              | 100mΩ              |                 |          | ±4%arc     |
| 2kΩ    | 50kΩ             | 1Ω                 |                 |          | -10Ω       |
| 20kΩ   | 500kΩ            | 10Ω                | ±(1%rdg+5dgt)   |          | 50V DC     |
| 200kΩ  | 5MΩ              | 100Ω               |                 |          |            |
| 2000kΩ | 50MΩ             | 1kΩ                |                 |          | ±4%arc     |
| 20MΩ   | 500MΩ            | 10kΩ               | ±(1.5%rdg+5dgt) |          |            |

#### Capacitance

| Range  | Analogue Maximum | Resolution Digital | Accuracy       |          | Test Voltage |
|--------|------------------|--------------------|----------------|----------|--------------|
|        |                  |                    | Digital        | Analogue |              |
| 2000pF | 2400pF           | 1pF                |                |          |              |
| 20nF   | 24nF             | 10pF               |                |          |              |
| 200nF  | 240nF            | 100pF              | ±(3%rdg+10dgt) | ±5%F.S.  | 50mV         |
| 2uF    | 2.4nF            | 1nF                |                |          | 400Hz        |
| 20uF   | 24uF             | 10nF               |                |          |              |

#### Instant Continuity

| Range | Analogue Maximum | Resolution Digital | Continuity Indication |   | Open Voltage |
|-------|------------------|--------------------|-----------------------|---|--------------|
|       |                  |                    | Built Buzzer          | sounds when Resistance is less than 40Ω |              |
| 200Ω  | 5kΩ              | 100mΩ              |                       |   | 3.2V MAX     |

#### Frequency

| Range  | Analogue Maximum | Resolution Digital | Accuracy      |          | Test Voltage |
|--------|------------------|--------------------|---------------|----------|--------------|
|        |                  |                    | Digital       | Analogue |              |
| 2000Hz | 2400Hz           | 1Hz                | ±(2%rdg+3dgt) | ±3%F.S.  | 350Vrms      |

#### Diode Test

Test Current 3.0 ± 0.6mA  
 Test Voltage 3.2V Max.

#### hFE Test

Base DC Current 10µA  
 Vce 2.8 ± 0.4V  
 hFE 1000

#### Packing Information

| QTY/CTN | N.W  | G.W  | G.UFF |
|---------|------|------|-------|
| 15PCS   | 12.5 | 13.5 | 2.57  |